LITERACY AWAKENING: NARROWING THE LITERACY DIVIDE AMONG RURAL CHILDREN

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ABSTRACT

This paper describes an intervention program initiated to assist children from disadvantaged backgrounds attain early literacy skills. The pedagogy includes use of play and technology. Data shows significant gains in assessment scores after seven months. Implications for policy and practice are offered.

INTRODUCTION

There's no question that most young children are learning to readbut the question is, how many of them are lagging behind their peers? The numbers may paint a dismal picture. Children in disadvantaged conditions fair badly not only compared to their counterparts in industrialized nations, but also those in much of the developing world as wellincluding Brazil, Indonesia and the Philippines, according to a landmark 2002 RAND Corporation study of adolescent literacy. Frustrated, many of these children will leave school. Poor literacy is the number-one risk indicator for dropping out. A common scenario is one where the good learners have mastered different strategies for approaching different types of writing. They're the ones asking relevant questions in class, while less-skilled learners sit quietly in the back row. It's not that they can't decode the wordsmost can even read aloud when asked. But comprehending the material is another story altogether. While not intuitive to all students, the necessary skills can be taught. It takes effort and supported practice in a classroom community where students and the teacher are working in tandem and enjoying the learning process (Gunn, Simmons, & Kameenui, 1995; Mason & Allen, 1986; Sulzby, 1990; Sulzby & Teale, 1991).

What Works

In many classrooms teachers are incorporating literacy into their science, economics, history and social studies curriculum. Many of the most successful ones center on structured small-group discussions. It seems obvious, but a big motivator and way to engage learners is to get them to take responsibility for their own learning. Research shows that attention and time for self-directed learning can help motivate (Stanovich, 1984; Strickland, 1990). Not surprisingly, it helps to work with materials that are relevant to the learners' lives. It's about refining teaching to help children learn strategies so they can understand texts.

In the absence of a national commitment to devote resources to literacy, schools struggle to find appropriate materials and approaches, and the funding to sustain their efforts. In some cases, schools lack funds to help students at risk. Other schools use private money to staff schools with literacy coaches, and to purchase materials and resources. While nations craft their approaches, schools and individual teachers continue their own efforts.

While it is agreed that literacy is a social, psychological, and linguistic process, an emergent literacy approach stresses that written and oral language develop concurrently and interrelatedly from birth. Both oral and written language are best learned when used in purposeful contexts and when children have opportunities to observe and interact with others who write and read (Clay, 1975; 1979; Harste, Woodward, & Burke, 1984; Sulzby, 1990) as opposed to rote learning of letters, words, or sounds.

At every level, from early childhood through adulthood, literacy is a critical survival component. In order to meet this goal, programs must be implemented to foster emergent

literacy for all children beginning with the earliest concepts.

The Context

The problem with difficulties in reading and writing is not new especially in under developed and developing countries and that the incidence of illiteracy is even greater in remote places. The reasons for this are several, including the possible weaknesses in teaching and learning methods, the lack of facilities that promote active learning, the lack of motivation and interest among children themselves and insufficient support and guidance from parents. If not tackled early this problem of illiteracy would persist as school children progress from one level to the next because of the cumulative effect of inadequacies to handle higher level reading and writing.

As discussed earlier, children who fail to 'catch on' early keep falling further and further behind and are likely to end up repeating a grade or assigned to transition classes (Strickland, 1990). As children who fall 'behind' in reading move into the upper grades, they have difficulty 'catching up.' rather they stay 'behind' (Clay, 1993). The outlook for children with reading difficulties to experience opportunities to develop literacy is grim. Individual Education Plans (IEPs) tend to emphasize fine motor tasks and self-help skills. Erickson and Koppenhaver (1995) found that when IEPs focused on academics, tasks were likely to include name recognition and rote memorization. These researchers observe that models of best practice providing strategies in how to provide appropriate literacy instruction to children with special needs are scarce at best.

The Intervention Program

This paper describes an intervention program to assist elementary school children gain reading, writing and arithmetic skills. The program is premised on instructional strategies facilitated by computer technology that provides an enjoyable learning environment while at the same time awakens children's latent potential. This is to create positive change in attitudes and interests towards reading, writing and arithmetic. Recognizing the fact that reading and writing form the basis for mastering other learning subjects and provide the road for high academic achievements in later life, this program is intended to bridge the literacy divide that exists between urban and rural schools in Malaysia. The country has a total population of about 25 million out of which primary school enrolment was 97.8 percent of the total children population aged 6 to 11 years in 2002. Overall literacy rate in the same year was 94.0 percent showing a slight increase compared to 93.7 percent in 1999, 93.8 in 2000 and 93.9 in 2001. These literacy rates are percentages of those who can read and write aged 10 years or more (Department of Statistics Malaysia, 2003). Although there has been improvement in the overall literacy rate, there are still pockets of illiteracy especially among children in the rural schools.

Program Strategy

This is a pullout program to assist learners with very low literacy level in their first language (Malay Language) to gain enough reading, writing and arithmetic skills to be at par with average learners. The intervention program was carried out over a period of seven months with the hope that after this period these learners would be able to continue in their respective classes together with their peers. Thus the program was designed to achieve the following objectives:

- Learners would be able to experience systematic teaching and learning in a normal classroom without being haunted by the problem of illiteracy
- Learners would be able to spell correctly
- Learners would be able to read and write numbers correctly
- Learners would be able to gain reading and writing skills in their first language
- Learners actively participate and enjoy the teaching and learning sessions using instructional technology
- Learners develop a love for books

The program grew out of a series of discussions between a school teacher and the authors in mid 2003, initiated by the former whose sincere intention was none other than to assist students with literacy difficulties. The successful implementation of the Reading Recovery program (Clay, 1993) on a national scale in New Zealand was used as a springboard in the design of this intervention program. The program design was premised on the belief that every child

can be helped to reach his/her full potential given the best possible learning opportunities. This challenges perceptions and beliefs about children with literacy difficulties who are at risk of failing.

This is how Hassan often begins his session, a pull-out class for primary school children with below-grade reading skills. He starts small, with magazine articles, maps or cartoons.

"Students learn the routines of comprehension on very simple texts. They're learning how to figure out words from alphabets. I get them into routines of interacting with the words and making connections, so that when I raise the bar in terms of difficulty, they can still do it," he says.

With each session, the children begin by noting the letters to the words and as they read. In small groups, they work through their lessons with classmates. "Children who are invisible in regular classes have nowhere to hide all of a sudden," says Hassan.

The learning material was developed by Hassan who became totally involved in teaching all the remedial classes. Instructional strategies emphasize active involvement and participation of students in the way of Confuscious, "Tell me and I forget. Show me and I remember. Involve me and I understand". Use of computer was an absolute necessity if the program was to create a different learning environment from the normal classroom and bring about fun and enjoyment in the learning process. It was not until early 2004 that the program was able to kick off when five personal computers and a printer were donated by one non-governmental organization (NGO). A special classroom was set up with an unconventional layout. The classroom design was a combination of a play school and a theme park with every item labelled to provide as much information as possible. Furniture used consists of low square and round tables where students face one another instead of facing the teacher who stands in front of the class. While these tables were placed in the centre of the classroom, the computers were all placed by the side to provide adequate space for children to move around.

The School and Children

The school is in a remote area of Kelantan, one of the poorest states in Malaysia. The student population in 2004 was 722 in primary year one to six, comprising 381 boys and 341 girls. There were 44 teachers, 14 males and 30 females, while the number of students per age level ranges from 100 to 133.

Children in this program were identified in the first week of 2004 school session from those in primary year two, three and four (ages 8-10). An assessment test on word recognition was used to diagnose the level of difficulty faced by the children and together with the recommendation of the previous year class teachers, they were placed in three groups - Good, Average and Weak. There were a total of forty-two students and their distribution by gender and class level is shown in Table 1 while their distribution by assessment score and class level is shown in Table 2.

Table 1 clearly indicates that the number of boys having literacy difficulties was much larger than the number of girls and that there were still a number of children with reading difficulties even after three years of schooling. It can also be observed in Table 2 that the learning problem is very serious considering the assessment only focused on word recognition. Although all but one child in primary year four could recognize small letters, capital letters and vowels, all of them seemed to score low in syllable recognition.

Table 1

Intervention Program 2004

Number of Children by Gender and Class Level

Class Level	Boys	Girls	Total
Year Two (8 yrs old)	12	5	17
Year Three (9 yrs old)	10	4	14
Year Four (10 yrs old)	8	3	11
Total	**30**	**12**	**42**

The children were all from low income families. Twenty-six of them are children of farmers and the remaining sixteen, labourers having a monthly income of between USD80 to USD185. All the children's mothers were housewives.

Teaching and Learning Approach

Table 2

Intervention Program 2004

Number of Children by Assessment Score and Class Level

Class Level	Word Recognition			
	Small Letter	Capital Letter	Vowel	Syllable
Year Two (n=17)	17 A	17 A	9 A 8 W	9 A 8 W
Year Three (n=14)	12 A 2 W	12 A 2 W	12 A 2 W	12 A 2 W
Year Four (n=11)	10 G 1 W	10 G 1 W	10 A 1 W	10 A 1 W
* G = Good, A = Average, W = Weak				

The children were grouped according to class level and level of literacy. The intervention program was implemented using module based instruction with a fixed schedule for a period of seven months. Each group was given one hour a day in the intervention class with half hour to learn reading and another half hour arithmetic. During other times children were in their respective classes.

Since the intervention classroom set-up was more like a play park, it had a small fish pond with a variety of colorful fishes, plants, a small stage for singing and such, mobiles and large alphabets, numbers and interesting pictures on the walls. Everything in the classroom had a label or name. Children were encouraged to play, teach their peers, use the computer to see and hear alphabets, numbers, words and the like and relate to the items displayed in the classroom. In short, the instructional materials were both meaningful and relevant. Counseling and motivational sessions were also provided on a regular basis to children as well as their parents to instill interest in the children and to encourage support from their parents. Monthly assessment was carried out and the children were then regrouped accordingly based on their achievements.

Outcomes

Effects include positive child and classroom changes as well as identification of necessary conditions for implementing the intervention. After seven months all forty-two children scored 'Good' in small letter, capital letter and vowel recognition and all but one scored 'Good' in syllable recognition. More than half of the children showed substantial improvement in their respective intervention group monthly assessments as well as their normal class tests. Table 3 shows that fifteen out of the total number of children who were in the intervention program returned to their respective classes for good.

Implications

Results from this study clearly show that accelerating literacy using technological support brings the strategies and theories behind literacy pedagogy into a manageable and easily understood process. In a sense, it provides techniques for reading and writing instruction across the curriculum. The approach presented above de-emphasizes “pieces” and focuses more on putting the learning puzzle together. It addresses the issues of motivation and instructional support and is especially helpful in demonstrating how elements of play and serious work form a cohesive instructional program.

Table 3

Intervention Program 2004

Number of Children in Intervention Classes Who Returned to Normal Classes

Class Level	Intervention Class	Normal Class
Year Two	17	6
Year Three	14	5
Year Four	11	4
Total	**42**	**15**

Implications for policy include:

- Early literacy success - the ultimate goal of educational reform efforts -- should be an integral theme of policy.

  Policymakers must keep in mind that the intended goal of education reform is success for all children. As such, policies should be directed at fostering success for all students.

- Policies should be written with an understanding of the contexts in which they are to be implemented to allow for flexibility at the local level.

  Policy on literacy should remain flexible enough to accommodate diversity among students. In short, policies should not create additional barriers to disadvantaged children.

Implications for practice include:

- Plan to evaluate the impact of your efforts early and often.

  Using both formative and summative evaluation information can lead to continuous improvement in the implementation of reform initiatives, and ultimately to greater student success.

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